

WHAT IS CLAIMED IS:

1. A travel direction device in which a direction about a traveling route is set, a notification of the direction is given less frequent than a number of times the a car drives the traveling route if the car drives the traveling route plurality of times.
2. A travel direction device according to claim 1, wherein the notification of the direction is given a predetermined number of times during a predetermined period of times.
3. A travel direction device according to claim 2, wherein the notification of the direction is given in a predetermined probability every time the car drives the travel route.
4. A travel direction device according to claim 3, wherein there are a plurality of types of notification of the direction, and the notification of direction is given by selecting at least one of the plurality of types thereof.
5. A travel direction device according to claim 3, wherein when the car enters a predetermined area including the traveling route a plurality of times, the notification of direction is given less frequently than a number of times for the car to enter the predetermined area.
6. A travel direction device according to claim 4, wherein when the car enters a predetermined area including the traveling route a plurality of times, the notification of direction is given less frequently than a number of times for the car to enter the predetermined area.
7. A travel direction device according to claim 5, wherein the predetermined area is constituted of a divided plurality

of areas, and the plurality of the areas is identified to notify the direction.

8. A travel direction device according to claim 7, wherein the predetermined area is a school zone centered about a school.

9. A travel direction device comprising a controlling means for setting a predetermined area centered about a school as a school zone and giving warning direction for traveling cautions when a car drives roads in the set school zone based on school days information and time information.

10. A travel direction device comprising a controlling means for setting a school zone centered about a school depending on types of the school, and giving a warning direction of traveling cautions when a car drives the road in the set school zone.

11. A travel direction device comprising a controlling means for setting a school zone centered about a school depending on types of roads, and giving a warning direction of traveling cautions when a car drives the road in the set school zone.

12. A travel direction device comprising a controlling means for setting a school zone centered about a school depending on road density, and giving a warning direction of traveling cautions when a car drives the road in the set school zone.

13. A travel direction device comprising a controlling means for setting a school zone centered about a school depending on area division, and giving a warning direction of traveling cautions when a car drives the road in the set school zone.

14. A travel direction device according to claim 9, wherein contents of the direction changes depending on school types, road types, insolation duration of the area, and vehicle speed.

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15. A travel direction device according to claim 9, wherein the direction is given before, during, and after passing the school zone.

16. A travel direction device according to claim 9, wherein a deceleration command signal is sent to a control device of the car when driving through the school zone so as to reduce the speed.

17. A travel warning direction device comprising a continuous driving detection means for detecting continuous driving condition by comparing to a pre-set reference value, and a warning output means for outputting the warning direction when the continuous driving is detected by the continuous driving detection means.

18. A travel warning direction device according to claim 17, wherein the continuous driving detection means detects long time driving.

19. A travel warning direction device according to claim 18, wherein the continuous driving detection means detects long distance driving.

20. A travel warning direction device according to claim 17, wherein detection by the continuous driving detection means is reset if discontinued for more than a predetermined period of time.

21. A travel warning direction device according to claim 17, wherein the travel warning direction device comprises a driver change detection means for detecting a change of a driver, and detection of the continuous driving detection means is reset when the driver change detection means detects the driver

change.

22. A travel warning direction device according to claim 17, wherein the reference value changes depending on road types.

23. A travel warning direction device according to claim 22, wherein the reference value changed depending on time zone.

24. A travel warning direction device comprising a monotony driving detection means for detecting whether of not a car drives with a pre-set reference speed for a predetermined period of time when driving on local roads, and a voice output means for outputting a voice warning direction when the monotony driving detection means detects that the car drives within the reference speed range for the predetermined period of time.

25. A travel warning direction device according to claim 24, wherein when detecting the monotony driving, a new reference speed is set when the car drives in a speed out of the reference speed range.

26. A travel warning direction device according to claim 25, wherein the monotony driving detection means has a plurality of reference speed candidates for possible reference speed to be set, sets the reference speed range between the reference speed candidate faster than the set reference speed and the reference speed candidate slower than the set reference speed, stores the last time of the set reference speed, sets the reference speed candidate out of the reference speed range as a new reference speed when the vehicle speed is out of the reference speed range, and calculates the traveling time of the new reference speed range from the latest time when the set reference speed stored immediately before.

27. A travel warning direction device according to claim 17, wherein expressions, age and sex of the voice, changes depending on time zone, season, events or a number of travel.

28. A travel warning direction device, in which the device outputs the voice warning direction when a long driving or long distance traveling is detected by comparing a pre-set reference value.

29. A travel warning direction device, comprising an unsafe driving detection means for detecting unsafe driving by comparing a pre-set reference value.

30. A travel warning direction device according to claim 29, wherein the unsafe driving detection means detects sudden start and sudden stop of the car.

31. A travel warning direction device according to claim 2, wherein the unsafe driving detection means detects abrupt steering by rotation of the vehicle.

32. A travel warning direction device according to claim 2, wherein the unsafe driving detection means detects abrupt steering by rotation of steering wheel.

33. A travel warning direction device according to claim 31, wherein the unsafe driving detection means detects abrupt steering by using an angular velocity sensor.

34. A travel warning direction device according to claim 29, wherein the warning direction by the voice output means is given in a certain ratio relative to a number of times the warning is generated.

35. A travel warning direction device according to claim 29, wherein the warning direction by the voice output means is given

irregularly with respect to a number of times the warning is generated.

36. A travel warning direction device according to claim 29, wherein expressions and sex and age of the voice by the voice output means changes depending on time zone, seasons, events, and a number of time of travel.

37. A travel warning direction device, comprising: a time zone detection means for detecting whether or not the time is in the daytime; a lighting detection means for detecting duration for the vehicle light being illuminated; and an output means for giving a warning direction to turn off the vehicle light when the daytime zone is detected and the vehicle light is detected as being on for more than a certain period of time.

38. A travel warning direction device according to claim 37, wherein the time zone detection means detects whether or not the time zone is in daytime from the current date information and position information.

39. A travel warning direction device according to claim 37, wherein the device comprises a means for detecting whether or not driving in the tunnel, and the warning direction is prohibited when driving the tunnel.

40. A travel warning direction device according to claim 37, wherein the device comprises a means for detecting bad weather, and the warning direction is prohibited when driving under the bad weather.

41. A travel warning direction device according to claim 37, wherein the warning direction is given when the time zone is not detected as the daytime, and if the vehicle light is not

detected to be turned on for more than a predetermined period
of time.

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